

Current Population Survey Food Security Supplement September 1996 Microdata File Description

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Document Revision History on ERS Worldwide Web Site

(Note: Posting to web may lag revision date by up to 10 days.)

January 5, 2000 - Original posting to ERS Worldwide Web site

May 17, 2000 - ERS supplied logical record length and added information on non-interview households in Ferret. The questionnaire was separated from this Technical Documentation/User Notes file.

Technical Description

The CD-ROM data file is in ASCII format and consists of 135,479 logical records. The length of each record is 1,086 characters. Each record represents one person in a surveyed household or one household that was eligible for the core labor-force survey but could not be contacted, or refused to participate. (Non-interview households are included in the CD-ROM file with their non-interview status indicated. Non-interview households are not included in the FERRET file.) A subset of variables on each record contains data about the household of which the person is a part. These variables have the same value for all persons in the same interview household.

Contents of the Data File

The file includes data in three general categories:

- (1) Monthly labor force survey data and recodes, collected by the Census Bureau for the Bureau of Labor Statistics. These variables are described briefly in the data dictionary. For concepts and definitions underlying these data, users should refer to the technical documentation for the CPS monthly labor force data available from the Bureau of Labor Statistics. Included are geographic, demographic, income, and employment data which may be of interest to those analyzing the food security supplement.
- (2) Food Security Supplement data, collected by the Census Bureau for the United States Department of Agriculture. These data consist of answers by household respondents to questions about household food expenditures, use of food assistance programs, and experiences and behaviors related to food security, food insecurity, and hunger. All of the Food Security Supplement data are household-level data except the supplement person weight.
- (3) Food security and hunger scale and status indicators calculated from the Food Security Supplement data by the Economic Research Service of the United States Department of Agriculture. These indicate the screening status of the household as well as continuous and categorical measures of food security status.

Contents of the Food Security Supplement

A facsimile of the Food Security Supplement questionnaire is available on the ERS web site (address at end of this document) or on the public-use data file CD-ROM available from the Census Bureau. The major sections are as follows:

(1) Food Spending (HES1A – HES8).

(2) Food Program Participation (HES9 – HES9GSP).

(2) Food Sufficiency, Food Security, and Ways of Avoiding or Ameliorating Food Deprivation (HES11A – HES58). This section includes the 18 food security and hunger items which are used to calculate the household food security scale.

Changes from April 1995 Food Security Supplement

The split ballot test of the two forms of the food sufficiency question (S11A and S11) was reallocated so that six rotations received the single question with four response categories and two rotations (3 and 8) received the two-question series.

Screening of households prior to the food security and hunger series was redesigned, see next section.

Screening of the Food Security Supplement

The Food Security Supplement includes several screens to reduce respondent burden and to avoid embarrassing respondents by asking them questions which are inappropriate given other information which they have provided in the survey. The screener variables use information from the monthly labor force core data as well as from the Food Security Supplement. Households with income above 185 percent of the poverty threshold for that household (HRPOOR=2, estimated from HUFAMINC and HRNUMHOU) were skipped over the questions on participation in food assistance programs. Households with income above 185 percent of poverty who registered little or no indication of food stress on HES15, HES16, or HESS11/11A were skipped over the entire “Food Sufficiency, Food Security, and the Ways of Avoiding or Ameliorating Food Deprivation” section. *Differing from 1995, even households with income below 185 percent of poverty were skipped over the rest of the questionnaire* if they registered no indications at all of food stress on HES15, HES16, or HESS11/11A.

Looking ahead, further changes in the initial screener will be introduced in 1997, and in 1998 the questionnaire will be reorganized and two “internal” screeners added in the main food security section (the questions which are used to calculate the household food security scale). These different screening procedures bias estimated prevalences of food insecurity and hunger differently in each year. Adjustments must be made for these differences to compare prevalences of food security and hunger across years. This topic is discussed further below under the heading “Food Security Scales and Screener Variables.”

Screeners also were applied based on whether the household included any children, so that households without children were not asked questions which refer specifically to children. This screener, as calculated at the time of the survey, classified as children all persons age 17 or younger. However, for processing and analyzing the food security data, persons who are household reference persons or spouses of household reference persons (PERRP=1, 2, or 3) are not considered children even if they are age 17 or younger. The food security scale, status, and screener variables reflect this recoding, however the individual item

responses are not recoded, and the user will need to recode these if they are to be analyzed or used to replicate scale scores.

Food Security Scales and Screener Variables

The main purpose of the Food Security Supplement is to provide information about food security, food insecurity, and hunger in the nation's households. Several variables are provided in the data file which identify the food security status of each household during the previous 12 months. All of these variables are based on responses to a set of 18 items in the Supplement which are indicators of food insecurity and hunger. HRFS12M3 is the raw score - a count of the number of items affirmed by the household respondent. Households that were screened out are assigned a score of -5 on this variable to remind users that they were not actually asked any of the 18 items. HRFS12M4 is the household food security scale score, a continuous score based on fitting the data to a single-parameter Rasch model using item calibrations calculated from the 1995 data. Computed values range from about 1 to 14. Scale scores for households that affirmed no items cannot be calculated within the Rasch model. These households are food secure, but the degree of their food security is not known, and may vary widely from household to household. They are assigned scale scores of -6 to remind users that they require special handling in analyses which assume linearity of the scale scores. Households that were screened out are assigned a score of -5 on this variable. HRFS12M1 is a categorical variable based on the scale score, which classifies households in three categories: food secure, food insecure without hunger, and food insecure with hunger. HRFS12M2 is the same as HRFS12M1 except that the food insecure with hunger category is subdivided to level 1 and level 2 hunger. The level 2 hunger category corresponds operationally with the "Severe Hunger" category described in *Household Food Security in the United States in 1995: Summary Report of the Food Security Measurement Project* published by the Food and Nutrition Service and with the "Food Insecure with Hunger (Severe)" category described in *Guide to Measuring Household Food Security - 2000*, also published by the Food and Nutrition Service.

The food security variables described in the previous paragraph are based on the 18 food security indicator items as they were administered in the 1996 survey. A second set of food security scale and status indicators are provided that are adjusted for inter-year differences in survey screening procedures. These "common-screen" variables are comparable to corresponding variables in the April 1997 and August 1998 data files. Corresponding variables for the 1995 data also are available from the Economic Research Service. Prevalence estimates based on these common-screen variables are comparable across these years. The common-screen based food security variables are HRFS12C3 (raw score), HRFS12C4 (Rasch-based scale score), HRFS12C1 (3-category food security status indicator), and HRFS12C2 (4-category food security status indicator). The common-screen food security variables are needed because the screening procedures used in administering the Food Security Supplements varied somewhat from year to year. In all years, households that were screened out after a few initial questions are classified as food secure. However, comparisons across years of the item responses of households with identical responses to the preliminary screener variables show that some households that were screened out under more stringent screening rules would have been classified as food insecure (or, in a few cases, even as food insecure with hunger) if they had not been screened out. The screening procedures, therefore, bias prevalence estimates of food security and hunger downward, and the extent of the bias varies across years. To compare prevalence rates across years, it is essential to adjust the data from each year so that it matches, as nearly as possible, a common set of screening procedures. That is, negative responses must be imputed to households that would have been screened out at the initial screener in any year. For surveys prior to 1998, negative responses also must be imputed to "downstream" variables for households that would have been screened out at either of the internal screens that were first implemented in 1998.

A screener status variable, HRFS12CS, is provided to indicate screening status under the 1995-1998 common screen. The variable indicates whether the household would have been administered all items, would have been screened out prior to the first of the 18 scale items, or would have been screened out at either of the two internal screens introduced in 1998.

Interview Households, Supplement Households, and Non-Interview Households

Non-interview households – those that were eligible for the survey but could not be contacted or declined to complete the core labor-force survey – are included in the file. Interview status is indicated by the variable HRHTYPE, which is positive for interviewed households and zero for non-interview households. (There is only one record for each non-interview household.) Some households that completed the core labor-force survey did not complete the Food Security Supplement. Supplement interview status is indicated by the variable HRSUPINT, which has a value of 1 for households that completed the supplement, 2 for households that completed the core but not the supplement, and -1 for core non-interview households.

Constructing Household Characteristics from Person Records

To compute some household characteristics such as household size, presence of children, or presence of elderly, it is necessary to identify the records of all persons in the same household. Households are uniquely and completely identified by State of residence (GESTCEN), household identifier (HRHHID), and household serial suffix (HSERSUF). Sort records within households by PERRP if the household reference person record must be the first record in the household. To match to other months' CPS files, add the HRMIS variable to the household identification, adjusting one of the files for the difference in survey month.

Weights - Estimating Population Distributions of Person and Household Characteristics

The CPS is a complex probability sample, and interviewed households as well as persons in those households are assigned weights so that the full interviewed sample represents the total national non-institutionalized population. Initial weights are assigned based on probability of selection into the sample, and weights are then adjusted iteratively to match population controls for selected demographic characteristics at State and national levels. There are two sets of household and person weights in this data file: (1) labor force survey weights, (2) Food Security Supplement weights.

The labor force survey weights, HWHHWGT for households and PWSSWGT for persons, are positive for persons in all interviewed households. These weights would be appropriate for analyzing whether households or persons who completed the supplement differed from those who declined to complete the supplement.

About twelve percent of households completed the core labor force survey, but declined to complete the Food Security Supplement. The supplement weights, HHSUPWGT for households and PWSUPWGT for persons, are adjusted for supplement non-response so that the supplement respondents represent the national non-institutionalized population. These weights are appropriate for estimating household distributions of variables in the food security supplement, including food security status.

Household weights are attached to all person records in the household. To estimate household frequency distributions, the sample must be limited to one record for each household. This is usually accomplished by limiting the sample to records of household reference persons (PERRP=1 or 2). Non-interview or non-supplement households must be excluded from these analyses based on HRHTYPE or HRSUPINT.

Further Information

Information on the Federal Food Security Measurement Project, and on survey and measurement issues is available from:

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<http://www.ers.usda.gov/briefing/foodsecurity/>